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ABSTRACT OF THE INVENTION

An input circuit for an integrated circuit receives an external signal and generates an amplified internal signal which has substantially equal rise and fall signal timing. That is, the rise time of a signal generated by the input circuit is substantially the same as the fall time of signal. This effect is achieved by regulating the current flowing through the input circuit. The input circuit includes a differential circuit which includes a first transistor that receives the external signal at its gate and a second transistor that receives a reference voltage at its gate. Sources of the first and second transistors are connected in common, and the differential circuit generates an internal signal in accordance with the current flowing through the first and second transistors. A current regulating circuit is connected to the differential circuit and regulates the current flowing through the differential circuit in response to the internal signal.

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